

STATE OF NORTH CAROLINA v. JOHN ROBERT CORRIHER

NO. COA06-954

Filed: 19 June 2007

Evidence--expert testimony--retrograde extrapolation evidence--novel scientific theory

The trial court did not abuse its discretion in a driving while impaired case by allowing the State's expert to offer testimony regarding retrograde extrapolation evidence to explain the novel scientific theory that a blood sample exposed to heat over 12 days might register a lower blood alcohol concentration than it would have at the time it was drawn, because: (1) defendant concedes that retrograde extrapolation evidence has been allowed in North Carolina in a line of cases dating back to 1985; (2) the witness was an expert in the field of retrograde extrapolation with respect to blood alcohol levels and has previously been recognized by the Court of Appeals as such; (3) there was sufficient indicia of reliability to allow the jury to consider the testimony in light of the expert's methods, background, and submission of his study for peer review; and (4) the lack of supporting data from similar tests and published peer review goes to the weight the jury might afford such evidence and not its admissibility.

Appeal by defendant from judgment entered 1 March 2006 by Judge W. David Lee in Rowan County Superior Court. Heard in the Court of Appeals 8 March 2007.

Attorney General Roy Cooper, by Special Counsel Isaac T. Avery, III, for the State.

Hall & Hall Attorneys at Law, P.C., by Douglas L. Hall, for defendant-appellant.

CALABRIA, Judge.

John Robert Corriher ("defendant") appeals from a judgment entered upon a jury verdict finding him guilty of driving while impaired ("DWI"). We find no error.

At trial, Timothy Crews ("Officer Crews"), an officer with the Salisbury Police Department, testified that on 13 June 2004 he observed a motorcycle traveling in his direction. Officer Crews noticed the motorcycle was exceeding the speed limit and initiated his lights and siren. The driver did not stop, but instead

increased his speed. Officer Crews stated that the motorcycle reached a speed of approximately 100 miles per hour during the chase. Officer Crews summoned additional officers who joined him in his pursuit of defendant. The officers chased defendant onto the property of Richard Stoner ("Stoner"), where defendant crashed through Stoner's fence before he was tackled and subdued by Officer Crews.

Defendant complained that his shoulder was injured, causing the officers to take him to the emergency room. Officer Crews testified that defendant had a strong odor of alcohol and red, glassy eyes. Based on defendant's demeanor, as well as the odor of alcohol and his red, glassy eyes, Officer Crews formed the belief that defendant was impaired. He read defendant his constitutional and statutory rights, and defendant signed a form consenting to a blood test. The blood test showed a blood alcohol level of .06 and the presence of cocaine.

Paul Glover ("Glover"), a research scientist and training specialist with the North Carolina Department of Health and Human Services, testified that the blood sample's alcohol concentration had likely eroded from lack of refrigeration. Specifically, the sample had never been refrigerated, but instead it was left in a patrol car. Glover based his testimony on a test he conducted with respect to alcohol concentration rates in refrigerated and unrefrigerated blood samples in which unrefrigerated samples showed a decrease in alcohol concentration.

The jury convicted defendant of DWI and felony speeding to elude arrest. Judge W. David Lee entered judgment on those verdicts, sentencing defendant to a minimum of 12 months and a maximum of 12 months in the North Carolina Department of Correction for DWI and a minimum of 7 and a maximum of 9 months for felony speeding to elude arrest. From the DWI judgment, defendant appeals.

On appeal, defendant argues the trial court erred by allowing the State's expert to offer testimony regarding retrograde extrapolation evidence. Defendant concedes that retrograde extrapolation evidence has been allowed in North Carolina in a line of cases dating back to 1985. *State v. Taylor*, 165 N.C. App. 750, 600 S.E.2d 483 (2004); *State v. Catoe*, 78 N.C. App. 167, 336 S.E.2d 691 (1985). However, he argues that the instant case can be distinguished from prior cases.

Typically, retrograde extrapolation evidence has been admitted to explain why a defendant's blood alcohol level might be lower upon testing than it was during his driving because the human body metabolizes alcohol at a rate of .0165 percent per hour. Here, retrograde extrapolation evidence was admitted to explain that a blood sample exposed to heat over 12 days might register a lower blood alcohol concentration than it would have at the time it was drawn. This issue thus presents a case of first impression in North Carolina evidentiary law.

"[T]rial courts are afforded 'wide latitude of discretion when making a determination about the admissibility of expert

testimony.'" *Howerton v. Arai Helmet, Ltd.*, 358 N.C. 440, 458, 597 S.E.2d 674, 686 (2004) (quoting *State v. Bullard*, 312 N.C. 129, 140, 322 S.E.2d 370, 376 (1984)). "Given such latitude, it follows that a trial court's ruling on the qualifications of an expert or the admissibility of an expert's opinion will not be reversed on appeal absent a showing of abuse of discretion." *Howerton*, 358 N.C. at 458, 597 S.E.2d at 686. North Carolina General Statute 8C-1, Rule 702 (2005) states in relevant part:

If scientific, technical or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion.

Id.

In evaluating the admissibility of expert testimony, North Carolina uses the three-step analysis announced in *State v. Goode*, 341 N.C. 513, 461 S.E.2d 631 (1995). The inquiries are: 1) whether the expert's proffered method of proof is sufficiently reliable as an area for expert testimony, *id.*, 341 N.C. at 527-29, 461 S.E.2d at 639-41; 2) whether the witness testifying at trial is qualified as an expert in that area of testimony, *id.*, 341 N.C. at 529, 461 S.E.2d at 640; and 3) whether the expert's testimony is relevant. *Id.*, 341 N.C. at 529, 461 S.E.2d at 641.

In the instant case, it is clear that Glover is an expert in the field of retrograde extrapolation with respect to blood alcohol levels, and has previously been recognized as such by this Court. See *State v. Teate*, 180 N.C. App. 601, 638 S.E.2d 29 (2006); *State*

v. Taylor, 165 N.C. App. 750, 600 S.E.2d 483 (2004). Likewise, it is clear that his testimony is relevant. Evidence is relevant if it "has any logical tendency however slight to prove the fact at issue in the case." *State v. Bullard*, 312 N.C. 129, 154, 322 S.E.2d 370, 384 (1984). The issue is whether the trial court abused its discretion by determining that the expert testimony presented was reliable.

In the instant case, we are presented with the issue of whether retrograde extrapolation evidence may be used to explain a decrease in the level of alcohol concentration in a blood sample left unrefrigerated. This requires us to apply the rules regarding the admission of novel scientific theories.

Where . . . the trial court is without precedential guidance or faced with novel scientific theories, unestablished techniques, or compelling new perspectives on otherwise settled theories or techniques, a different approach is required. Here, the trial court should generally focus on the following nonexclusive "indices of reliability" to determine whether the expert's proffered scientific or technical method of proof is sufficiently reliable: "the expert's use of established techniques, the expert's professional background in the field, the use of visual aids before the jury so that the jury is not asked 'to sacrifice its independence by accepting [the] scientific hypotheses on faith,' and independent research conducted by the expert."

Howerton, 358 N.C. at 460, 597 S.E.2d at 687 (citations omitted).

In the present case, Glover testified on voir dire that he had conducted a test in which blood was drawn from individuals after they had consumed alcohol and then evaluated after being stored for 78 days without being refrigerated. He stated the test was

conducted using accepted procedures and methodology and its results were published to the scientific community in newsletters and presented at scientific conferences. Glover, as a research scientist and training specialist with the North Carolina Department of Health and Human Services, undoubtedly has a strong background in this field and has testified often in the courts of this state.

On voir dire, Glover stated that the alcohol content was reduced by approximately 10 percent after the first 72 hours, and was then reduced by an additional one or two percent over the next 75 days. Glover noted that refrigerated samples of the same blood did not show a decreased alcohol concentration. Glover further stated that his study had been presented at peer conferences and the results published in "half a dozen different newsletters."

[R]eliability is . . . a preliminary, foundational inquiry into the basic methodological adequacy of an area of expert testimony. This assessment does not, however, go so far as to require the expert's testimony to be proven conclusively reliable or indisputably valid before it can be admitted into evidence. In this regard, we emphasize the fundamental distinction between the admissibility of evidence and its weight, the latter of which is a matter traditionally reserved for the jury.

Howerton, 358 N.C. at 460, 597 S.E.2d at 687. Our review of the case law makes it clear that North Carolina allows expert testimony more liberally than many other jurisdictions. "[W]e do not adhere exclusively to the formula, enunciated in *Frye v. United States*, 293 F. 1013 (D.C. Cir. 1923), and followed in many jurisdictions, that the method of proof 'must be sufficiently established to have

gained general acceptance in the particular field in which it belongs.'" *State v. Pennington*, 327 N.C. 89, 98, 393 S.E.2d 847, 852 (1990).

In light of Glover's methods, background, and submission of his study for peer review, we determine the trial court did not err by concluding there was sufficient indicia of reliability to admit evidence of the study. We note that Glover's explanation of the test and its submission for peer review is not for the purpose of establishing the test or that the test results are conclusively valid; rather it provides sufficient reliability to allow a jury to consider the testimony. The lack of supporting data from similar tests and published peer review goes to the weight the jury might afford such evidence, not its admissibility. "[V]igorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence." *Howerton*, 358 N.C. 461, 597 S.E.2d at 688 (quoting *Daubert v. Merrell Dow Pharms.*, 509 U.S. 579, 596 (1993)).

Accordingly, we determine the trial court did not abuse its discretion by allowing Glover to testify that a blood sample's alcohol content may be degraded while stored unrefrigerated in a police car for 12 days.

No error.

Judges McGEE and STEPHENS concur.